

Claims

1. Sound generating apparatus comprising:

- a first cavity (110);
- a second cavity (120); and
- a electro-mechanical transducer (100),
said electro-mechanical transducer (100) exciting sound waves in said first cavity (110)
and said second cavity (120);

characterized by

- a third cavity (130),
said third cavity (130) being connected to said first cavity (110) via at least one first
passage (115) of predefined shape, said third cavity (130) being connected to said second
cavity (120) via at least one second passage (125) of predefined shape,
said third cavity (130) having one or more outlets (150) allowing for radiating sound
waves (160) into the exterior.

2. Apparatus according to any one of the preceding claims, wherein said electro-mechanical transducer (100) has a main direction (185) for emitting sound and a supplementary direction (190) for emitting sound, wherein sound waves emitted along said main direction (185) are radiated into said first cavity (110) and sound waves emitted along said supplementary direction (190) are radiated into said second cavity (120).

3. Apparatus according to any one of the preceding claims, wherein said first cavity (110) has a first volume and said second cavity (120) has an essentially bigger second volume.

4. Apparatus according to any one of the preceding claims, wherein said first cavity (110) and said third cavity (130) have substantially an approximately same volume.

5. Apparatus according to any one of the preceding claims, wherein said first cavity (110) and said second cavity (120) are arranged adjacent to each other, wherein said first cavity (110) and said second cavity (120) are spatially separated from each other by said electro-mechanical transducer (100).

6. Apparatus according to any one of the preceding claims, wherein said electro-mechanical transducer (100) is a loudspeaker.

7. Apparatus according to any one of the preceding claims, wherein said apparatus is suitable for being implemented in a portable electric device (200).

8. Mobile electric device comprising a sound generating apparatus comprising:

- a first cavity (110);
- a second cavity (120); and
- a electro-mechanical transducer (100),
said electro-mechanical transducer (100) exciting sound waves in said first cavity (110) and said second cavity (120);

characterized by

- a third cavity (130),
said third cavity (130) being connected to said first cavity (110) via at least one first passage (115) of predefined shape, said third cavity (130) being connected to said second cavity (120) via at least one second passage (125) of predefined shape,
said third cavity (130) having one or more outlets (150) allowing for radiating sound waves (160) into the exterior.

9. System for generating sound comprising:

- a first cavity (110);
- a second cavity (120); and
- a electro-mechanical transducer (100),
said electro-mechanical transducer (100) exciting sound waves in said first cavity (110) and said second cavity (120);

characterized by

- a third cavity (130),
said third cavity (130) being connected to said first cavity (110) via at least one first passage (115) of predefined shape, said third cavity (130) being connected to said second cavity (120) via at least one second passage (125) of predefined shape,
said third cavity (130) having one or more outlets (150) allowing for radiating sound waves (160) into the exterior.

AMENDED CLAIMS

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AMENDED CLAIMS

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original claims 1-9 replaced by amended claims 1-13 (3 pages)]